# AMENDMENTS

**In the Claims**

1. – 12. (**Canceled**)

13. (**Currently Amended**) An apparatus for detecting a molecule that modulates activity of a membrane-spanning, signal-transducing protein, the apparatus comprising:

a membrane-spanning, signal-transducing protein (MSST) ~~of any one of claims 1-12~~ **comprising a conformationally-sensitive detectable probe positioned on or within a conformationally sensitive region of the MSST protein, with the proviso that no probe is positioned in a transmembrane domain, wherein interaction of the MSST protein with an agonist or antagonist causes a conformational change in the conformationally sensitive region and a change in a detectable signal of the conformationally sensitive detectable probe**; and

a immobilization phase to which the MSST protein is attached.

14. – 15. (**Canceled**)

16. (**New**) The apparatus of claim 13, wherein the conformationally-sensitive detectable probe is a detectable chemical label attached to an amino acid residue of the conformationally sensitive region.

17. (**New**) The apparatus of claim 16, wherein the detectable chemical label is a fluorescent probe.

18. (**New**) The apparatus of claim 13, wherein the conformationally sensitive region is in an intracellular loop, an extracellular loop, an N-terminal domain, or a C-terminal domain of the MSST protein.

19. (**New**) The apparatus of claim 13, wherein the MSST protein is selected from the group consisting of a G protein coupled receptor (GPCR), an ion channel, or a transporter protein.

20. (**New**) The apparatus of claim 13, wherein the MSST protein is a G-protein coupled receptor (GPCR), and the conformationally sensitive region is an intracellular loop, an extracellular loop, an N-terminal domain, or a C-terminal domain of the GPCR.

21. (**New**) The apparatus of claim 20, wherein the conformationally sensitive region is a third intracellular loop of the GPCR, and the conformationally sensitive detectable probe is a detectable chemical label attached to one or more amino acid residues within the third intracellular loop so that a conformational change in the GPCR due to interaction with an agonist or antagonist causes a change in the detectable signal of the detectable probe.

22. (**New**) The apparatus of claim 21, wherein the detectable chemical label is attached to an amino acid residue corresponding to amino acid residue at position 265 in a β2-adrenergic receptor.